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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,966	09/20/2001	Gregory S. Andre	017750-413	1908
21839	7590	01/11/2005		EXAMINER
				AHN, SAM K
			ART UNIT	PAPER NUMBER
			2637	

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/955,966	ANDRE ET AL.
Examiner	Art Unit	
Sam K. Ahn	2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 20 September 2001.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-9 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-9 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 20 September 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: on page 5, please update the co-pending application number. Appropriate correction is required.
2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

3. Claims 1-9 are objected to because of the following informalities:

In claim 1, line 11, delete "transmitting is configured to interleave" and insert "transmitting instructions is configured to interleave said".

In claim 2, line 1, delete "for transmitting is" and insert "for independently transmitting instructions is".

In claim 2, line 2, delete "interleave instructions" and insert "interleave the instructions".

In claim 3, line 2, delete "for transmitting" and insert "for independently transmitting".

In claim 3, line 2, delete "interleave instructions" and insert "interleave the instructions".

Claims 4-9 directly or indirectly depend on claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Bastiani et al., USP 6,609,167 B1 (Bastiani).

Regarding claim 1, Bastiani teaches a transceiver (172 in Fig.10) for use within a multi-tier system bus configuration comprising: means for independently receiving and transmitting instructions (368 in Fig.41) via the system bus (166 in Fig.10) from one or more devices (106 in Fig.10) connected to the system bus, means for buffering instructions received and transmitted (354, 356, 358, 360, 362, 364, 366 in Fig.10) via the system bus, wherein said means for independently receiving instructions is configured to discriminate between different types of input, and wherein said means for independently transmitting instructions is configured to interleave said instructions (as taught by Bastiani, DMA instructions are buffered in 356,358,360 elements, while HCI instructions

including interrupt are buffered in a separate memory (362,364,366), thus discriminating and interleaving the packets being transmitted and received (note col.48, lines 50-67).

Regarding claims 2 and 5, Bastiani teaches all subject matter claimed, as applied to claim 1. Bastiani further teaches wherein said means for independently transmitting is configured to interleave the instructions based upon instruction type (wherein the instruction types are divided between DMA and HCI, as explained above).

Regarding claims 3 and 6, Bastiani teaches all subject matter claimed, as applied to claim 2 or 5. Bastiani further teaches wherein said instructions are contained within packets and said means for independently transmitting is configured to interleave the instructions based upon packet type (as separate memories are buffers are implemented depending on the packet type).

Regarding claims 4 and 7, Bastiani teaches all subject matter claimed, as applied to claim 3 or 6. Bastiani further teaches wherein said packets comprise DMA and CA (control action or control interrupt or HCI) packet types (note col.48, lines 57-59).

Regarding claim 8, Bastiani teaches all subject matter claimed, as applied to claim 1. Bastiani further teaches wherein said means for receiving is configured to provide specialized control functions, such as a reset function (see Fig.26 and note col.42, lines 26-28).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bastiani et al., USP 6,609,167 B1 (Bastiani) in view of Gephardt et al., USP 5,555,430 (Gephardt).

Regarding claim 9, Bastiani teaches all subject matter claimed, as applied to claim 8. As explained previously, Bastiani further teaches said specialized control functions, such as a reset function. However, Bastiani does not explicitly teach further control functions of a timer function and a broadcast function. Gephardt teaches in the same field of endeavor, having a system bus wherein packets are transmitted and received from the system bus and further teaches such control functions of the timer (timer latency) and broadcast (broadcast interrupt) functions (note col.22, line 61 – col.23, line 17). Therefore, it would have been obvious to one skilled in the art at the time of the invention to include

the functions of timer and broadcast, as taught by Gephardt in Bastiani's system for the purpose of increasing the control functions, and thus provide the system with a more controllable system through the control functions.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wang et al., USP 6,327,625 B1, teach storing in a different memory location corresponding to the packet type.

Livingston et al., USP 4,612,653, teach DMA controller coupled to a bus line storing data received in a buffer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Ahn whose telephone number is (571) 272-3044. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sam K. Ahn
1/10/05



YOUNG T. TSE
PRIMARY EXAMINER